

REMARKS

Claims 1-7 and 11 remain in the present application. Claims 8-10, 12-19, and 20-23 were previously cancelled without prejudice. Claims 1 and 7 are hereby amended. No new matter is being added.

Drawings Objection

In accordance with the Examiner's objection to the drawings, reference signs 100, 101, and 103 have been removed from amended FIG. 1 in the enclosed replacement sheet. In addition, the specification has been amended to correct a typographical error by replacing "determined 308" with --determined 310--. Applicants respectfully submit that these corrections satisfy the objection.

Claims Rejections

Claims 1-7 and 11 are rejected under 35 USC 102(e) as anticipated by Gerlach et al. Claims 1 and 7 are hereby amended. Applicants respectfully traverse this rejection with respect to the claims as now amended.

The Gerlach et al. reference discusses a focused ion beam (FIB) apparatus including an ion optical column. An electron source provides electrons that are directed through the final lens of the ion optical column to neutralize at least a portion of the accumulated charge on the sample. (Gerlach et al., Abstract).

The claims, as amended, are patentably distinguished over the Gerlach reference. As amended, claims 1 and 11 each require "determining an energy filter cut-off voltage" and "adjusting a focusing condition of an electron imaging system based on a change in the energy-filter cut-off voltage so as to maintain a focus of the electron image." (Emphasis added.) In other words, the energy filter cut-off voltage is tracked, and an electron image is kept in focus by controlling a parameter of the system based on a change in the cut-off voltage.

Gerlach et al. neither discloses nor suggests the aforementioned requirement of “adjusting a focusing condition of an electron imaging system based on a change in the energy-filter cut-off voltage so as to maintain a focus of the electron image.” Specifically, the paragraph at column 6, lines 33-49 of Gerlach et al. merely discusses the need to change focusing properties of a first ion lens **110** to compensate for changes in a second ion lens **112**. In addition, the paragraph at column 7, line 57 to column 8, line 6 of Gerlach et al. merely discusses use of a high-pass filter with a cut-off voltage **508** selected so that only ion-beam-generated secondary electrons **446** pass the filter and go on to the detector, while neutralizing-electron-generated secondary electrons **448** are rejected by the filter and so are not detected. Hence, the aforementioned limitation is neither disclosed nor suggested by the above-recited sections of Gerlach et al. Nor does the aforementioned limitation appear to be disclosed or suggested elsewhere in Gerlach et al.

For at least the above-discussed reasons, claims 1 and 11, as amended, are now patentably distinguished over the cited art. Claims 2-7 depend from claim 1 and so are now also patentably distinguished over the cited art for at least the same reasons.

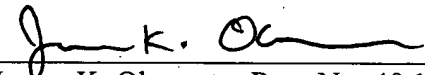
Conclusion

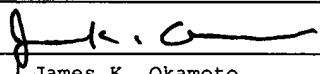
Applicants respectfully submit that claims 1-7 and 11, as amended, are now in patentable form. Favorable action is respectfully requested.

Respectfully submitted,
Mark A. Neil, et al.

Dated: August 24, 2004

By:


James K. Okamoto, Reg. No. 40,110
Okamoto & Benedicto LLP
P.O. Box 641330
San Jose, CA 95164
Tel.: (408)436-2110
Fax.: (408)436-2114

CERTIFICATE OF MAILING			
I hereby certify that this correspondence, including the enclosures identified herein, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. If the Express Mail Mailing Number is filled in below, then this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service pursuant to 37 CFR 1.10.			
Signature:			
Typed or Printed Name:	James K. Okamoto	Dated:	August 24, 2004

DRAWING AMENDMENTS

Please replace the original sheet having FIG. 1 with the following replacement sheet having amended FIG. 1. The amended FIG. 1 removes the reference signs 100, 101, and 103.